### **REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Initially, it is noted that the Examiner has failed to acknowledge the claim for foreign priority in item 12 on page 1 of the Action, and also has failed to acknowledge that all certified copies of the priority documents have been received. A certified copy of the priority documents were filed in the international phase. Enclosed please find a copy of form PCT/IB/304.

Acknowledgement is respectfully requested.

Claims 16-17 and 19 are indicated to be withdrawn from further consideration and are required to be cancelled on page 2 of the Action.

Claims 16-17 and 19 are cancelled without prejudice in this amendment.

Claims 1, 2 and 15 are rejected under 35 USC 112, second paragraph, as being indefinite for the reasons set forth on page 3 of the Action.

Claim 1 has been amended to limit Ar to the groups recited in the paragraph beginning on line 13 of page 21 of the specification.

Ring A has been limited to benzene, which is supported by original claim 5, which is optionally substituted by 1 to 5 substituent(s) which are recited on page 16, line 34 to page 19, line 7 of the specification.

Claim 1 has furthermore been amended to limit the substituted hydroxyl group of  $R^1$  to a hydroxy group or a  $C_{1-10}$  alkoxy group, considering the Examiner's indication that hydroxy and o-lower alkyl are indicated to be enabled by the specification in the rejection under 35 USC 112, first paragraph. See the bottom of page 3 of the Action.

The Examiner points out that the <u>······</u> is not included in claim 1. The absence of <u>······</u> is caused to have failure to show the full broken line due to an inappropriate line margin and/or due to appropriate printer software. The PCT publication correctly shows the <u>······</u> lines. Accordingly, claim 1 has been amended to correct this problem by replacing the formula with that from the PCT application. A copy of claim 1 of the published application is attached for the Examiner's information.

Lastly, claims 2 and 15 have been cancelled with respect to the prodrug.

In view of the foregoing, the rejection of the claims under 35 USC 112, second paragraph, is deemed to be overcome.

Claims 1-15 and 18 are rejected under 35 USC 112, first paragraph, on the basis that the specification is enabling for making the elected group of compounds wherein Xc is O, Xb is  $(CH_2)_n$  wherein n is 1 or 2, A is benzene,  $R^1$  is OH or o-lower-alkyl.

The claims have been amended as suggested by the Examiner.

Accordingly, this ground of rejection is deemed to be overcome.

Claims 1-15 and 18 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over the claims of co-pending application Serial No. 10/584,481.

The Examiner is respectfully solicited to hold this ground of rejection is abeyance.

Lastly, claims 1-15 and 18 are rejected under 35 USC 103 as being unpatentable over Tajima et al., WO 99/11255 in view of Kurobe et al., WO 02/083616. This ground of rejection is respectfully traversed as applied to the amended claims.

While claims 1-15 are directed to tricyclic ring structures, the cited references WO 99/11255 and WO 02/083616 both disclose compounds having a bicyclic structure. The basic structures of the claimed compounds and the reference compounds are clearly different. Thus the present invention cannot be derived or suggested from either of the cited references and a combination thereof.

In addition, the compounds of claims 1-15 and 18 are CPR40 receptor agonists, but the compounds of the cited references are PPAR agonists. The cited references are silent on a GPR40 agonist activity.

Thus this ground of rejection is deemed to be overcome.

Lastly, it is noted that new claims 21-23 are added for additional patent protection and are supported by original claims 16, 17 and 19. Furthermore, claim 15 has been amended to include a pharmacologically acceptable carrier in conformance with U.S. practice. This amendment is supported on page 65, line 1 of the specification.

In view of the foregoing, it is believed that each ground of rejection set forth in the Official Action has been overcome, and that the application is now in condition for allowance. Accordingly, such allowance is solicited.

Respectfully submitted,

Tsuneo YASUMA et al.

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# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

**PCT** 

#### NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

TAKASHIMA, Hajime Fujimura Yamato Seimei Bldg. 2-14, Fushimimachi 4-chome Chuo-ku, Osaka-shi Osaka 5410044

With thanks

AUG. - 5, 2004

Date of mailing (day/month/year) 22 July 2004 (22.07.2004)

Applicant's or agent's file reference 09646

International application No.

PCT/JP2004/007770

International publication date (day/month/year)
Not yet published

Applicant

IMPORTANT NOTIFICATION

International filing date (day/month/year) 28 May 2004 (28.05.2004)

Priority date (day/month/year)

Japan

30 May 2003 (30.05.2003)

TAKEDA CHEMICAL INDUSTRIES, LTD. et al

- By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority
  documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s)
  relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the
  right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or
  transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- 2. (If applicable) The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is
- 3. (If applicable) An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

Priority date	Priority application No.	Country or regional Office or PCT receiving Office	Date of receipt of priority document
30 May 2003 (30.05.2003) 07 May 2004 (07.05.2004)	2003-153986 / 2004-139144 /	. JP 15 Ju	ly 2004 (15.07.2004) ly 2004 (15.07.2004)

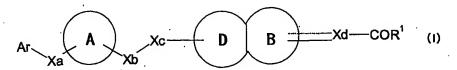
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Remedios Landicho (Fax 338 7010)

Telephone No. (41-22) 338 9999

#### 請求の範囲

## 11. 式

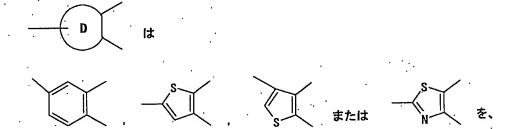


[式中、Ar は置換されていてもよい環状基を、

5 環 A はさらに置換されていてもよい環(但し、該環はチアゾール、オキサゾール、イミダゾールおよびピラゾールでない)を、

Xa および Xb は独立して、結合手または主鎖の原子数が 1 ないし 5 個のスペーサーを、

Xc は 0、S、SO または SO<sub>2</sub>を、



10

環Bは5ないし7員環を、

Xd は結合手、CH または CH<sub>2</sub>を、

 $\dots$ は、Xd が結合手または  $CH_2$  であるとき単結合を、Xd が CH であるとき二 重結合を、

15 R¹は置換されていてもよいヒドロキシ基を示す。

ただし、

- (i)環Aがベンゼンであるとき、Arで示される環状基はキノリニル基でなく、
- (ii) 環 B が 5 ないし 7 員芳香環であるとき、環 A で示される環はチオフェンまたはフランでなく、
- 20 (iii) 環 B がベンゼンであるとき、環 A で示される環は 5 員芳香族複素環でなく、 (iv) 環 B がシクロヘキサンであるとき、Xd は結合手でない。] で表わされる化 合物 [ただし、

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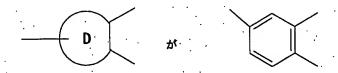
[6-(4-ビフェニリル)メトキシ-2-テトラリン]酢酸;

[6-(4-ビフェニリル)メトキシ-2-テトラリン] 酢酸メチル;

[7-(4-ビフェニリル)メトキシ-1, 2, 3, 4-テトラヒドロ-2-オキソ-3-キノリン] 酢酸;および

- 5 [7-(4-ビフェニリル)メトキシー1, 2, 3, 4-テトラヒドロー2-オキソー3-キ ノリン] 酢酸メチルを除く] またはその塩。
  - 2. 請求項1記載の化合物のプロドラッグ。
  - 3. Ar で示される環状基が芳香族炭化水素基である請求項1記載の化合物。
  - 4. Xa が結合手である請求項1記載の化合物。
- 10 5. 環 A がベンゼンである請求項1記載の化合物。
  - 6. Xb が-CH2-である請求項1記載の化合物。
  - 7. Xc が 0 である請求項1記載の化合物。

8.



- 15 である請求項1記載の化合物。
  - 9. 環Bが5ないし7員非芳香環である請求項1記載の化合物。
  - 10. 環 B がシクロペンタンまたはテトラヒドロフランである請求項9記載 の化合物。
  - 11. Xdが CH2である請求項1記載の化合物。
- 20 12. R<sup>1</sup>がヒドロキシ基である請求項1記載の化合物。
  - 13. 式

$$Ar^1 - Xa^1 + A^2$$

$$O + CH_2COOH$$

$$B^2$$